EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

To PCRK F16

M E M O R A N D U M

Date: June 3, 1996

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo
Michael Jarvis
Thomas Linson
John Bonsett
Rick Littleton

From: James H. Keith, Project Manager
Earth Tech
5010 Stone Mill Road
Bloomington, IN 47408

Subject: **Report of additional CMS Activities for the Former Amphenol RFI/CMS; May, 1996**

May Activities

Monitoring well casing tops for newly installed wells, and manhole rims along Forsythe Street were surveyed, as were stream bottom elevations between the storm sewer outfall and the Forsythe Street Bridge. The original Unit C contacts identified in the bank of Hurricane Creek had been obliterated by bank collapse probably brought about by flooding. Three new contacts were located and flagged and surveyed in as well.

Discrepancies were noted between new survey elevations and those measured during the RFI. The surveyor was contacted and asked to check his field notes and calculations. He reported that while surveying in the control panels at the Former Amphenol Site in 1992, he made an error and that all elevations in the RFI are 0.76 lower than the true elevation. The elevation data are consistent with one another, however, and the RFI findings and conclusions are unchanged. All maps and sheets for the CMS Addendum are not corrected (i.e., they are still 0.76 feet low) so that these results will be comparable with the RFI and CMS data already generated. A note has been added to each sheet pointing out the discrepancy, and a letter to this effect has been prepared for inclusion in the RFI report at the Johnson County Public Library.

Analytical data were received for all samples collected and the data packages were sent out for validation. Preliminary sheets and data tables were prepared, and work on the CMS Addendum was initiated.

June Activities

The CMS Addendum report will be prepared and submitted to U.S. EPA by June 18, 1996.

Buller

D.3.6

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

IND 004 587 848

Date: May 3, 1996

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo, Michael Jarvis, Thomas Linson, John Bonsett, Rick Littleton

From: James H. Keith, Project Manager
Earth Tech
5010 Stone Mill Road
Bloomington, IN 47408

Subject: **Report of additional CMS Activities for the Former Amphenol RFI/CMS; April, 1996**

April Activities

From April 4 through April 8, 1996, Earth Tech drilled and installed four monitoring wells along Forsythe Street and Ross Court. Well locations are as shown in the figure in the approved work plan. Two piezometers were installed 20 feet north and south of MW-31. All wells and piezometers were completed with flush-mount protective covers and locking caps.

In accordance with Modification 2 of the Region 5 approval letter, a soil boring (SB-1) was also advanced about 100 feet north of the Forsythe Street bridge. Soil samples were collected here in the event they were needed and the boring was subsequently backfilled.

All borings were continuously sampled with a 3-inch split spoon and described by an Earth Tech geologist. Attempts were made to collect Shelby tube samples of the top of Unit C at MW-31 and MW-34 for permeability analysis in accordance with Modification 1 of the Region 5 approval letter.

Soil samples were screened in accordance with Modification 3 of the Region 5 approval letter.

All wells were developed after installation by bailing and surging on April 8, 1996 in accordance with Modification 5 of the Region 5 approval letter, and small amounts of potable were utilized to hydrate the bentonite pellets used in well construction.

A round of tapedowns for all on-site and off-site wells was conducted on April 8, 1996.

Water samples were collected on April 9, 1996, except that samples for inorganics were collected as described in Modification 7 of the Region 5 approval letter, using a peristaltic Geopump, Teflon-lined hose and Horrid instrument to test for turbidity.

Two soil samples from each boring were submitted to Earth Exploration, Inc. of Indianapolis, Indiana for grain size analysis. Soil samples from the top of Unit C were submitted for permeability analysis from SB-1 and MW-31. This deviation from Modification 1 of the Region 5 approval letter resulted from the fact that the top of Unit C was too stiff and dense to advance a Shelby tube. Three-inch split spoon samples were obtained from the top of Unit C at every boring instead, but all samples except for SB-1 and MW-31 cracked (again from the texture of the clay), making them useless for permeability analysis.

BL-kk-d:FC0496.DOC

Pump tests were performed after sampling.

The banks of Hurricane Creek were inspected from the Forsythe Street bridge upstream to a point near the Needmore Elementary School to locate areas of active seepage from the north, and for a contact between Unit C and overlying sands and gravels. No seeps were observed, nor could the point be located where the stream bed began to cut into Unit C. However, the top of Unit C was located and flagged at several points where the bank had been undercut between the Forsythe Street bridge and the storm sewer outfall.

There were no direct data available regarding the invert elevations of the sanitary sewer along Forsythe Street; however tapedown data were provided by the Franklin Board of Public Works.

May Activities

All wells, casing tops and manhole rims in Operable Area 3 will be surveyed the first full week of May, 1996. This survey will also include bottom elevations of Hurricane Creek at the storm sewer outfall, the Hurricane Road bridge and one point between the two. Unit C contact points along Hurricane Creek will also be surveyed in. Work on the CMS report addendum will commence as soon as sufficient data has been returned from the laboratory.

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

Date: April 2, 1996

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo, Michael Jarvis, Thomas Linson, John Bonsett, Rick Littleton

From: James H. Keith, Project Manager
Earth Tech
5010 Stone Mill Road
Bloomington, IN 47408

Subject: **Report of additional CMS Activities for the Former Amphenol RFI/CMS; March, 1996**

March Activities

On March 18, 1988, Respondents received written approval of its February 9, 1996 Work Plan by Certified Mail. The approval letter contained certain modifications that were incorporated into the Work Plan. On March 18, 1996, Respondents made a written request to the Franklin Board of Public Works for permission to conduct drilling and well installation within the city right-of-way along Forsythe Street and Ross Court. Permission was granted by the Board on March 26, 1996 with the stipulation that the owners/residents of dwellings adjacent to the well installations be notified prior to beginning work.

April Activities

Field work will begin the week of April 1 after the residents adjacent to the drilling work have been contacted. All samples should be collected and submitted for analysis by the middle of the following week. A copy of the final RFI report has been prepared and will be placed in the Adult Reference Section of the Johnson County Public Library in Franklin for public review. It was noted that EPA also recommended placing appropriate Technical Memoranda with the RFI report. Three major Technical Memoranda had been prepared during the RFI:

- Soil-gas Sampling Activities and Results for the RFI/CMS at the Former Amphenol Facility at 980 Hurricane Road (April 8, 1992)

- Preliminary Results of Plume Delineation in the Upper Aquifer (Unit B) at the Former Amphenol Facility at 980 Hurricane Road, Franklin, Indiana (June 23, 1992)
- Results of November, 1992 Geoprobe Ground Water Sampling Results at the Former Amphenol Facility at 980 Hurricane Road, Franklin, Indiana (November 23, 1992)

Since the results of all three memoranda were addressed in the RFI report, their inclusion with the main report appears to be unnecessary.

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

Date: March 4, 1996

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo, Michael Jarvis, Thomas Linson, Susan Gard, Jon Bonsett, Rick Littleton

From: James H. Keith, Project Manager
Earth Tech
5010 Stone Mill Road
Bloomington, IN 47408

IND 004 587 646

D.3.1

Subject: **Report of additional CMS Activities for the Former Amphenol RFI/CMS; February, 1996**

February Activities

On January 31, 1996 a there was a meeting at the US EPA Region 5 offices at Chicago to discuss the need for additional field work in Operable Area 3 (Forsythe Street). Attending the meeting were representatives for Region 5 and representatives for respondent Amphenol Corp. Also in attendance was a representative of Earth Tech as consultant for the respondents, and representatives from A.T. Kearney as consultant for Region 5. Based on the results of that meeting, respondents submitted a work plan and schedule dated February 8, 1996 that discussed the tasks and deliverables for the additional CMS field work. On February 29, 1996 a conference call was held to discuss possible additions and changes to the submitted work plan. Respondents were informed that Regions 5 would approve the work plan with certain conditions attached, and that a written reply would be forthcoming. The written reply has not yet been received.

March Activities

If there are no problems with the conditions that accompany Region 5 approval of the work plan, the plan will be submitted to the Franklin Board of Public Works for approval to work in the city right-of-way along Forsythe Street. Upon approval of the work plan, by the Board, field work will commence in accordance with the agreed upon schedule for work.

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

D.3.6

Date: February 8, 1995

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo
Susan Gard
John Bonsett
Ruth Williams

From: James H. Keith, Project Manager
Earth Tech (formerly WW Engineering & Science)
5010 Stone Mill Road
Bloomington, IN 47408

IND 044 587 848

Subject: **Report of CMS Activities for the Former Amphenol RFI/CMS; February - March, 1995**

February and March Activities

In February, the draft CMS report was prepared and reviewed. The completed draft CMS report was submitted to U.S. EPA Region 5 on March 6, 1995. We are awaiting comments from your agency.

The ICM began operations the latter part of February. ICM performance information and conclusions are located in Section 4.0 of the CMS report.

We do not anticipate submitting additional monthly progress reports for this project.

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

IND 044 587 848

Date: February 7, 1995

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

cc: Sam Waldo
Susan Gard
John Bonsett
Ruth Williams

From: James H. Keith, Project Manager
Earth Tech (formerly WW Engineering & Science)
5010 Stone Mill Road
Bloomington, IN 47408

D.2.8

Subject: **Report of CMS Activities for the Former Amphenol RFI/CMS; January, 1995**

January Activities

In January, the following CMS development work was completed:

1) A review of the ARARs developed for the RFI report determined all values developed for constituents of concern identified in the RFI are still valid.
2) The initial screening matrix has been completed in draft form.
3) Conceptual alternatives appropriate for the site were developed from the screening matrix and are being evaluated.
4) Associated alternative costs are being developed.

The CMS work is between 50 percent and 60 percent complete. No problems are being encountered.

A site visit on January 10, 1995 showed that the ICM air stripper building and concrete slab floor is in place. Subsurface lines from the pumping wells have been brought to the building. Wehran anticipates having the system operational in late January or early February.

Hurricane Creek was observed to be flowing on January 10 from upstream of the storm sewer outfall downstream to its confluence with Youngs Creek.

February Activities

A site visit is planned in early February to observe the operation of the ICM. Other work will consist of completing the screening and evaluation of alternatives and writing the draft CMS report.

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

M E M O R A N D U M

Date: January 5, 1995

To: William Buller
US EPA, Region 5, HRE-8J
77 West Jackson Boulevard
Chicago, IL 60604-3590

cc: Sam Waldo
Susan Gard
John Bonsett
Ruth Williams

From: James H. Keith, Project Manager
Earth Tech (formerly WW Engineering & Science)
5010 Stone Mill Road
Bloomington, IN 47408

Subject: Report of CMS Activities for the Former Amphenol RFI/CMS; December, 1994

December Activities

In a November 28, 1994 letter to Mr. Samuel Waldo of Amphenol, US EPA, Region 5 approved with modifications the September 2, 1994 "Work Plan for a Corrective Measures Study for the Former Amphenol Facility Franklin, Indiana". The letter was received by Amphenol on December 6, 1994. Activities in December consisted of forming an CMS project team consisting of James H. Keith, Bloomington, Indiana office, as Project Manager; Lucy Pugh, PE, Grand Rapids, Michigan office, CMS Technical Project Coordinator, and Wayne Langeland, Grand Rapids, Michigan office, as Project Assistant. A kickoff meeting was conducted for key Earth Tech personnel on December 16, 1994. Relevant technical documents and reports generated by the RFI and the ongoing site ICM were gathered and reviewed. Corrective Measures alternatives are being identified and screened. CMS work was about 20 per cent complete as of the and of December. No problems have been encountered at this time.

Wehran has completed site pump testing for the ground water ICM. Equipment and materials have been ordered for ICM installation.

The approved CMS work plan included a June 14, 1994 "Supplemental Work Plan for Sampling Creek Bed Water in Hurricane Creek, RCRA Facility Investigation, Former Amphenol Facility, Franklin, Indiana". Hurricane Creek has been periodically observed since early summer of 1994 to determine if low (zero) flow conditions are present. For every observation, Hurricane Creek has been observed to be flowing in the reach from the storm drain outfall downstream past the Forsythe Street bridge.

January Activities

A site visit is planned by Earth Tech for the second week of January, 1995. Work will continue on the evaluation, justification and recommendation of site Corrective Measure Alternatives. Construction work is expected to begin on the ICM by Wehran.

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; April and May, 1993

DATE: June 8, 1993

April Activities

The draft RFI report was completed and distributed to all parties named in the Consent Order. We are awaiting comments.

May Activities

Due to an unusually wet spring the Geoprobe work off-site could not be finished in time for the RFI report. Specifically, additional samples were to be collected from the back yard of a a residence east of Forsythe Street, and from west of Forsythe Street. At the request of U.S. EPA, another attempt was to be made to collect a ground water sample from PGP-11 which before yielded too little water to sample with the Geoprobe. All samples were collected on May 21, 1993. In order to collect sufficient water, the Geoprobe had to move north about 100 feet. Samples have been submitted for analysis

to the contract laboratory along with all appropriate QA/QC samples, and results are expected in the middle of June.

June Activities

The analytical results will be reported to all parties as a letter addendum when they are received. The addendum will present the data and QA/QC results, and any appropriate conclusions

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

TO: William Buller
U.S. EPA, Region V, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: James H. Keith, Project Manager
W/W Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; March, 1993

DATE: April 7, 1993

MARCH ACTIVITIES

All analytical data were received from the contract laboratory. These were submitted for validation in accordance with applicable CLP guidelines. Data were also submitted to the WWES Grand Rapids office to allow an update to the Qualitative Risk Assessment.

Permission was granted to collect additional Geoprobe ground water samples from two private properties, one east and one west of Forsythe Street; however saturated soil conditions prevented access to these sites in March, and sampling is rescheduled for April. The analytical data from these two sampling points will be submitted either as a letter addendum to the Draft RFI report, or will be added to the report when it is being revised. These data will serve to provide additional delineation to the ground water contaminant plume along Forsythe Street, and the absence of these data in the Draft RFI report are not expected to materially affect the conclusions and recommendations.

APRIL ACTIVITIES

The draft RFI report is being completed and will be submitted to U.S. EPA for review and comment on or before April 28, 1993. The two Geoprobe ground water samples will be collected with appropriate QA/QC samples and submitted for analysis.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; February, 1993

DATE: March 9, 1993

FEBRUARY ACTIVITIES

On February 2, 1993, WWES personnel took a round of on-site ground water level measurements on existing and newly installed wells, and developed the newly installed wells.

On February 12, 1993, Franklin Power Products received a letter from U.S. EPA, Region V approving the December 28, 1992 "Supplement to the October 12, 1992 RFI Work Plan - SOP (Standard Operating Procedure) for Off-Site Geoprobe Ground - Water Sampling for CLP Analysis for the Former Amphenol Site RFI". On February 16, WWES personnel began work at the former Amphenol site to implement the supplemental off-site soil descriptions and ground water sampling and screening in accordance with the December 28 SOP, and to collect ground water samples in accordance with the original October 12, 1992 Work Plan.

sanitary sewer that starts at the Former Amphenol site, runs west along Hamilton, then south down the center of Forsythe. The sanitary sewer is about 8 feet below grade, and the ground water samples were collected at depths generally ranging from 13 to 15 feet.

Screening parameters are not detected approximately 200 feet east and west of Forsythe; they are not detected along Hamilton west of the Forsythe Street intersection, and they are not detected along Forsythe about 250 feet south of the entrance to Ross Court.

Most ground water Geoprobe samples were collected for contract laboratory analysis at the edges of the area described above. Two samples were collected within the area: one at 990 Hamilton Avenue, and one at 720 Forsythe Street. Sampling activities had to be curtailed because of prior commitments by the Geoprobe crew, and the need to secure permission to collect samples on private property.

MARCH ACTIVITIES

One additional ground water sample should be collected on private property east of Forsythe to determine if ground water constituents of concern extend beneath the residences on that side of the street. Another should be collected from the grounds of a trucking company on the west side of Forsythe. Efforts are being made to secure permission to collect both samples. As soon as access is granted, additional ground water samples and QA/QC samples will be collected and submitted to the contract laboratory for analysis.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; January, 1993

DATE: February 8, 1993

JANUARY ACTIVITIES

On January 7, 1993, the three deep wells (MW-23, MW-25 and IT-1A) were again purged. MW-23 had about 140 gallons purged; MW-25 had about 295 gallons purged, and IT-1A had about 60 gallons purged. Tapedown measurements were performed on other site wells. On January 13-15, monitoring wells MW-27, MW-28, MW-29 and MW-30 were installed in accordance with the October 12, 1992 Work Plan. Soil samples were collected from MW-27 at depths of 15 feet (top of saturated zone) and 23 feet (bottom of boring). A duplicate was also collected of the 15-foot sample. Samples were submitted, along with an equipment blank, to the contract laboratory for analysis in accordance with the QAPP.

While drilling for MW-29, the auger struck the storm sewer. Instead of the concrete pipe construction observed at other points, the sewer construction proved to be asphalt-sealed CMP, and the auger grazed and penetrated the south edge of the sewer between the top

5010 Stone Mill Road Bloomington, IN 47408 812/336-0972 Fax 812/336-3991
Bloomington, IN Chattanooga, TN Columbus, OH Detroit, MI Grand Rapids, MI Indianapolis, IN Milwaukee, WI Minneapolis, MN

and the bottom. All appropriate utilities were notified and several utility representatives inspected the area. Only the storm sewer was damaged. The Franklin City Sewer Department recommended a sheet metal patch be applied and requested that they be notified when repairs were underway so that they could inspect the work. An HNU probe was lowered into the hole to detect any volatile organic vapors. None were detected, nor were there any odors that suggested the presence of contaminants in the sewer.. Drums of soil were placed over the hole to locate it and keep people away.

Owing to difficulties in scheduling an excavator, repair work was not performed until January 28, 1993. The soil was excavated to expose the opening, and Rick Littleton of the Franklin City Sewer Department and John Bonsett of the Johnson County Health Department were notified that the excavation was ongoing and came to observe. Routine HNU monitoring of the breathing zone was being performed. The probe was lowered once into the pipe opening and a reading of 450 ppm was obtained. At intervals, organic odors briefly came from the pipe opening. HNU readings were taken constantly, but HNU values in the breathing zone were not high enough to justify upgrading from Level D to Level C (see Health and Safety Plan). However, the excavation was vacated every time odors came from the pipe opening. A patch of appropriate size was cut from sheet metal, cemented over the opening with heavy asphalt mastic, and held in place by backfill. This was approved by the Franklin Sewer Department.

In the opinion of the city and county personnel observing the repair work, the smells and HNU readings from the storm sewer may be the result of something entering the sewer from upgradient, and Mr. Bonsett was going to investigate the situation.

FEBRUARY ACTIVITIES

In December, a Standard Operating Procedure (SOP) Addendum to the October 12, 1992 Work Plan was prepared and submitted for off-site Geoprobe sampling. Several comments and criticisms were offered by the Agency and the SOP has been revised and resubmitted. We are awaiting comments and/or approval by your agency so that we may begin the additional field sampling and complete the RFI phase of this work.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, HRE-8J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; December, 1992

DATE: January 11, 1993

DECEMBER ACTIVITIES

A Standard Operating Procedure (SOP) Addendum to the October 12, 1992 Work Plan was prepared and submitted for off-site Geoprobe sampling. Several comments and criticisms were offered by the Agency and the SOP has been revised and resubmitted.

JANUARY ACTIVITIES

On-site well installation will proceed in January according to the October 12, 1992 Work Plan, and the three deep wells will again be purged. Off-site work and water sample collection and analysis will await the resolution of the proposed off-site work addendum.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; November, 1992

DATE: December 9, 1992

NOVEMBER ACTIVITIES

A Geoprobe study was conducted in accordance with the Work Plan for additional site work approved October 19, 1992. The results of the Geoprobe work were submitted as a Technical Memorandum dated November 19 to your office. Based upon the Geoprobe results, the Work Plan was proposed to be modified to omit the placement of monitoring wells off-site. An alternate approach using the Geoprobe apparatus to collect ground water samples for full CLP analysis for VOCs, metals and total and amenable cyanide was recommended, and three off site sampling locations were proposed. Following sampling at each point, the location would be marked with a rebar stake. The sampling point elevations would be established and the sampling points tied into the existing on-site sampling grid by survey.

No changes were proposed for the on-site additional work.

DECEMBER ACTIVITIES

Based upon your comments, a Standard Operating Procedure SOP is being prepared to cover sampling off-site. The SOP will include equipment used, sampling locations, sampling methodologies, analytical parameters, sample containers and preservation, sample handling, recordkeeping and QA/QC. WWES will modify the SOP as required.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science
A Summit Company

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; October, 1992

DATE: November 9, 1992

OCTOBER ACTIVITIES

On October 12, a revised Work Plan for installation of additional monitoring wells and sampling at the former Amphenol facility was submitted to U.S. EPA. A letter from your agency dated October 19 was received approving the Work Plan with the provision that analysis of monitoring well samples shall include the volatile organic compound analytes and metal analytes listed in the Quality Assurance Project Plan dated May 25, 1991. On October 26, a letter was drafted and sent to your agency that included a tentative timetable for completing the field work and submitting the draft RFI report. The city license providing access in the city right-of-way to perform Geoprobe work was agreed to and signed by all parties, and approved by the Franklin Board of Public Works on October 27. Letters were sent by the Johnson County Health Department on October 28 to residents in the Area of Concern described in the Work Plan.

NOVEMBER ACTIVITIES

The Geoprobe study to provide tentative location of the plume boundary off site is expected to begin on November 3 and end on November 6, after which a new license will have to be signed with the city for placement of monitoring wells off the former Amphenol property. We expect that all new monitoring wells, both on- and off-site, will be in place by the end of November, and will be ready for sampling.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; September, 1992

DATE: October 6, 1992

SEPTEMBER ACTIVITIES

Comments were received from US EPA on the draft Work Plan to gather additional RFI data at the former Amphenol facility. The Work Plan has been revised and sent to Franklin Power Products and Amphenol for internal review prior to submittal to US EPA. Susan Gard, the corporate counsel for Curtis Publishing is presently convalescing after surgery and has been unable to review the document and add comments. When the document has been reviewed, it will be submitted to US EPA.

Negotiations have been ongoing with the City of Franklin to obtain a license to perform additional data gathering activities in the city right-of-way.

A draft copy of the notification letter for residents in the area of concern south and southeast of the former Amphenol facility has been forwarded to US EPA.

OCTOBER ACTIVITIES

The revised draft Work Plan will be submitted to US EPA. Field activities will begin as soon as the document is approved.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; August, 1992

DATE: September 8, 1992

AUGUST ACTIVITIES

A draft Work Plan describing additional tasks to be performed at the former Amphenol facility was submitted to US EPA on August 4, 1992. Some recommended revisions were transmitted by FAX from you on August 28, 1992, and these are being incorporated into the Work Plan. It is our understanding that a copy of the Work Plan was forwarded to Tom Linson of IDEM for their review.

On August 20, 1992, representatives of WW Engineering & Science and Franklin Power Products met with John Bonsett of the Johnson County Health Department to inform that agency of the preliminary findings described in the June 23, 1992 Plume Delineation Report. Present were Susan Gard of Curtis Publishing, Larry Light and John Kneebone of Franklin Power Products, James Keith and John Bassett of WW Engineering & Science, and John Bonsett and Terry Bayless of the Johnson County Health Department. The need to notify the public in potentially affected areas downgradient from the former Amphenol site was discussed with Mr. Bonsett, and he offered to have the Johnson

County Health Department contact residents in potentially affected areas by letter. A draft letter will be prepared by Susan Gard and reviewed by all parties, including US EPA, before it is sent out on Johnson County Health Department letterhead. Mr. Bonsett was also consulted regarding contacts to be notified within the Franklin city government.

A meeting was held at 8 AM on August 26, 1992 at the Franklin City Hall. The following persons were present:

Mike Jarvis - Franklin Power Products

Charles Littleton - Mayor of Franklin

Susan Gard - Curtis Publishing

James Keith - WW Engineering & Science

Sam Waldo - Amphenol Corporation

John Bonsett - Johnson County Health Department

Rick Littleton - Franklin Sewage Treatment Plant

Jack Matthews - Franklin Fire Chief

Norman Blankenship - Franklin Police Department

Steve Williams - Franklin City Engineer

Roger Young - Franklin City Attorney

The purpose of the meeting was to bring Franklin City officials up to date on activities at the former Amphenol site, talk about future site activities and ask for city assistance in conducting off site testing in public right-of-ways. The need to notify the public and the role of the Johnson County Health Department was discussed. The city of Franklin appears to be willing to grant permission to work off site on city right-of-way, so long as a written agreement is signed by all parties. This will be prepared.

SEPTEMBER ACTIVITIES

WWES is awaiting additional comments on the Work Plan. When a letter is adopted to be sent to the public, it will be mailed on Johnson County Health Department letterhead to residents located in the affected area.

cc: Susan Gard
John Bonsett
Sam Waldo
Tom Linson

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; July, 1992

DATE: August 6, 1992

JULY ACTIVITIES

Based upon submittal of the draft Technical Memorandum on June 23, 1992, U.S. EPA forwarded a letter to Franklin Power Products requiring submittal of a plan with 30 days of receipt of the letter proposing additional sampling to properly delineate the contaminant plume. The letter was dated July 1, 1992, and was received by Franklin Power Products on July 6, 1992. A work plan is being prepared for submittal to U.S. EPA the first week of August.

The draft Technical Memorandum noted that ground water levels in the vicinity of the storm sewer were below the storm sewer invert during the initial phase of the RFI field work. The draft Technical Memorandum pointed out the need to collect ground water samples and sewer outfall samples when the ground water level was above the sewer invert. A round of ground water levels taken on July 23, 1992 indicated that ground water levels in the vicinity of the storm sewer were above the sewer invert, probably as a result of heavy rains during June and July. The decision was made to sample the wells in the vicinity of the storm sewer and the storm sewer outfall as quickly as possible under these favorable conditions. On July 27, 1992, wells IT-2, IT-3, MW-12 and MW-22 were purged and sampled, along with a trip blank and an

equipment blank. The storm sewer outfall was sampled and flow was determined with a Pygmy current meter. Water samples were submitted to Southwest Laboratory of Oklahoma with proper labeling and under proper chain-of-custody for analysis for total metals, VOC's and total and amenable cyanide. On July 29, 1992, the three Unit D wells were each purged of about 200 gallons of water, but were not sampled.

The Superintendent of the Franklin City Sewers was consulted to determine if any houses in the vicinity of the former Amphenol site that were hooked to the city sewer system, were not connected to city water. There proved to be none. contact clients those not connected to sewer

AUGUST ACTIVITIES

A work plan covering issues discussed in the draft Technical Memorandum will be submitted the first week of August. Additional information regarding area ground water users will be determined from locating private wells in the field, based upon well logs provided by the Indiana Division of Water.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; June, 1992

DATE: July 6, 1992

ACTIVITIES

In accordance with Section VII.2.a(4)(c)(ii) of the Consent Order, a draft Technical Memorandum dated June 23, 1992 was submitted to U.S. EPA Region V. The purpose of the memorandum was to provide a summary of the results of the initial plume investigation after receipt of validated analytical results. The ground water report determined that the plume could not be delineated with the information available. According to Section VII.2.a(4)(c)(iii) of the Consent Order, EPA will give notification of the need to submit a plan proposing the installation of additional wells and additional sampling so as to properly delineate the contaminant plume.

JUNE ACTIVITIES

A work plan covering issues discussed in the draft Technical Memorandum is being prepared. The work plan will be submitted to U.S. EPA Region V within 30 days of written notification.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

August 7, 1992

William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

Dear Mr. Buller:

I am enclosing a revised July report for your files. The new report newly corrects some errors in the original. There are no substantive changes.

Very Truly Yours,

James H. Keith
Senior Ecologist

Enclosures

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; June, 1992

DATE: July 6, 1992

ACTIVITIES

In accordance with Section VII.2.a(4)(c)(ii) of the Consent Order, a draft Technical Memorandum dated June 23, 1992 was submitted to U.S. EPA Region V. The purpose of the memorandum was to provide a summary of the results of the initial plume investigation after receipt of validated analytical results. The ground water report determined that the plume could not be delineated with the information available. According to Section VII.2.a(4)(c)(iii) of the Consent Order, EPA will give notification of the need to submit a plan proposing the installation of additional wells and additional sampling so as to properly delineate the contaminant plume.

JUNE ACTIVITIES

A work plan covering issues discussed in the draft Technical Memorandum is being prepared. The work plan will be submitted to U.S. EPA Region V within 30 days of written notification.

cc: Susan Gard
John Bonsett Johnson &

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; May, 1992

DATE: June 5, 1992

ACTIVITIES

Validated data have been returned from the WWES Grand Rapids office. Some questions about possible missing MS\D analyses have been forwarded to the contract laboratory, and copies of the validated data, plus old IT data and applicable ATEC data are being used to prepare a Quantitative Risk Assessment (RA) in accordance with the IT Work Plan. Data tables, maps, cross sections and most figures have been prepared for the draft RI report. We are awaiting the formal validation report and the Quantitative Risk Assessment so they can be inserted into the report. At this time, we anticipate sending the report to U.S. EPA Region V for review on or before June 28, 1992.

JUNE ACTIVITIES

June activities will consist of readying the draft RI report for client review and submittal to U.S. EPA Region V.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; April, 1992

DATE: May 5, 1992

ACTIVITIES

All analytical results are undergoing data validation at the Grand Rapids, Michigan Office. Unvalidated data have been transcribed and are being used to prepare a draft RFI report and draft report maps and figures. A proposed report format has been developed as follows:

Cover/Title Page
Contents

1.0 Introduction

2.0 Site History
2.1 Previous Use
2.2 Previous Studies
2.3 Mitigation Activities
2.4 Description of Current Situation

3.0 Site Description
3.1 Site Setting
3.2 Geology and Soils
3.3 Hydrology

4.0 Field Investigations
4.1 Hydrogeologic Study
4.2 Soil Gas Study
4.3 Sample Network and Sample Types

4.4 Monitoring Well Installation
4.5 Sampling Methods and Materials
4.6 Decontamination Procedures
4.7 Potentially Contaminated Materials
4.8 QA/QC

5.0 Results
5.1 Hydrogeologic Study
5.2 Soil gas Study
5.3 Soil Boring Analysis
5.4 Surface Water Analysis
5.5 Sediment Analysis
5.6 Ground Water Analysis
5.7 QA/QC

6.0 Interim Corrective Measures

7.0 Risk Assessment/Identification of Potential Receptors

8.0 Bibliography

Attachments

MAY ACTIVITIES

Copies of previous analytical results are being forwarded to the Grand Rapids office. These will be evaluated and used along with the RFI analytical results to perform a qualitative Risk Assessment. It is anticipated that a draft RFI report will be forwarded to U.S. EPA for review on or before June 24, 1992 (210 calendar days after final QAPjP approval).

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; March, 1992

DATE: April 6, 1992

ACTIVITIES

Ground water samples were collected between March 2 and March 6, 1992 in accordance with the QAPjP. On March 25, 1992 well locations were measured on the ground to confirm their positions for our sample location map. Tapedown measurements were taken during both the ground water sampling period and the March 25 visit. Another round of oxygen readings were taken at surface water sampling locations with the DO meter. Dissolved oxygen was also determined by titration at these locations and compared favorably with the meter readings. The reason for the earlier DO meter discrepancies has not been determined.

A draft copy of the technical memorandum was prepared for the soil gas sampling and distributed to Franklin Power Products and Amphenol personnel for review. The draft is being revised for U.S. EPA review.

All analyses for soil borings, surface water and ground water have been received and checked for completeness. These have been forwarded to our Grand Rapids office for validation.

PROBLEMS

During ground water sampling on March 2, it was noted that MW-25 appeared to be plugged with bentonite about 20 feet below the top of the casing. After several attempts, part of the material was cored out of the casing on March 9, and a portion fell to the bottom of the well. The well was bailed down extensively and then sampled. Preliminary results from the analytical laboratory do not indicate unusual levels of contaminants from the sample. Since bentonite would be present outside the well casing above the gravel pack, it is unlikely that the bentonite is a source of contamination to the well. Nor does it appear that any bentonite left in the casing has decreased the ability of the well to produce sufficient water for sampling, or will affect water level readings. The driller could not explain the reason that the bentonite was in the casing. The well appears to be unimpaired for our purposes, and we are instructing field personnel to insure that in the future, the well top is kept capped at all times while the well is being installed.

MARCH ACTIVITIES

When ground water analytical results are received, they will be checked for completeness and forwarded to our Grand Rapids office for validation. Preliminary results have been transcribed from the data sheets and are being used to prepare preliminary data tables and figures for the RFI report.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; February, 1992

DATE: March 5, 1992

ACTIVITIES

On February 3, 1992 WWES mobilized its field equipment to begin drilling activities at the Former Amphenol site. Drums were brought to the site to contain cuttings from borings and 465-gallon poly containers were brought to contain rinsate and purge water. These were stored in the pretreatment building. The drilling contractor, Environmental Drilling, Inc. arrived at the site on February 4, 1992. Drilling and well installation activities were as follows:

2/4/92 -	MW-26, soil samples 6.0 and 12.0 feet
2/5/92 -	MW-20, soil samples 6.0 and 12.0 feet
2/6/92 -	MW-24, soil samples 6.0 and 12.0 feet
2/7/92 -	SB-3, soil samples 6.0 and 10.0 feet
2/7/92 -	SB-4, soil samples 6.0 and 10.0 feet
2/10/92 -	SB-5, soil sample 2.0 feet
2/10/92 -	SB-8, soil samples 2.0 and 19.0 feet
2/11/92 -	MW-22A (MW-22, hit top of storm sewer and had to move boring; took 0-2.0 foot sample and counted as a sample from MW-23)
2/11/92 -	MW-22, soil samples 10.0 and 19.0 feet
2/12/92 -	SB-6, soil samples 8.0 and 17.0 feet
2/13/92 -	MW-23, soil sample 21.5 feet
2/18/92 -	MW-25 (deep well), soil sample 10.0 feet
2/19/92 -	MW-25, soil sample 35.0 feet
2/20/92 -	MW-21, soil samples 12.0 and 18.0 feet
2/21/92 -	SB-7, soil samples 8.0 and 18.0 feet

2/21/92 - SB-9, soil samples 12.0 and 18.0 feet
2/25/92 - Three surface water samples; five surface sediment samples
2/26/92 - SB-1, soil samples 10.0 and 12.0 feet
2/26/92 - SB-2, soil sample 10.0 feet
2/27/92 - additional flow measurements SW-5

A total of 30 soil samples were collected from borings. Because one of the end products of this study is to be a Risk Assessment, three of the soil samples were collected at or near the soil surface to assist in assessing risks from soil inhalation or contact (SB-5, SB-8, MW-22A). Because of the numbers and locations of the rest of the soil samples collected, we feel that this in no way detracts from the ground water portion of the study.

In previous discussions, it was noted that the Consent Order required water samples to be collected from SW-1 (Hurricane Creek upstream from the storm sewer outlet) and SW-5, the upgradient end of the storm sewer on the Arvin property (noted after the Consent Order was signed). For surface water samples to have any meaning with respect to the former Amphenol site, surface water points SW-5 and SW-2 (the storm sewer outlet) would at least have to be analyzed. Since EPA was unwilling to change SW-1 to SW-2, surface water points SW-1, SW-2 and SW-5 were used to collect samples for analysis.

Other site activities included inspecting wells IT-1A, IT-2, IT-3, MW-3, MW-9 and MW-21, and changing the locks on the protective cases for our own. The wells were bailed to insure that they would produce sufficient water for sampling. All well purge water was stored in the poly containers in the pretreatment building.

PROBLEMS

No serious problems have been encountered at this stage of the RFI. What problems have been encountered have been dealt with as follows.

A preliminary examination of the cyanide vault from under which samples SB-1 and SB-2 were to be taken indicated that the vault had been installed as three horizontal sections or "rings", with a distinct seam at each section, and what appeared to be a seam (when viewed from inside the vault) at the top edge. We could not collect soil borings in or near the tank with a drill rig because of power lines above, and it was decided to remove the top of the tank, core through the bottom of the tank using a floor drill with a diamond core bit, and collect soil samples from beneath by hand using a stainless steel bucket auger. Since in-ground tanks tend to be surrounded by coarse fill, hand augering along the outside of the tank was not considered. The tank cover was to remain in place until the work day to avoid being filled by precipitation, and creating safety and potential sample contamination problems. It was discovered that what appeared to be a seam inside the top cover was not, and the tank top could not be removed. The opening at the top was large enough for a person to enter, but the tank is a confined space and if an emergency were to occur, bringing an unconscious person out of the small opening would be nearly impossible. Wile considering alternatives, an attempt was made to auger down alongside the north and south ends of the tank by hand to see if the auger would be refused, and at what depth. The tank proved to have no coarse fill around it. The borings were placed about six inches from the north and south tanks ends, and were advanced by hand to one foot below the tank bottom using a regular steel auger. At that point, a precleaned stainless steel auger was attached and the boring was completed and samples were collected at the appropriate intervals (1.5 feet and 3.5 feet beneath the tank bottom). The boring was checked periodically with an HNU. No readings above background were detected until the level of the tank bottom was reached. Cuttings from this zone were placed in a drum for storage.

Some difficulty was experienced in obtaining DO readings from Hurricane Creek. The machine was properly calibrated and tested in the laboratory prior to use in the field.

Readings taken of the storm sewer water (SW-2 and SW-5) were in the normal range; however, readings taken in Hurricane Creek consistently went off the scale, whether the probe was placed in the creek or it was placed in a container of creek water. If a container of creek water was shaken then a reading taken, the reading was again in the normal range for water. The YSI Company technical representative could offer no problems with the meter that would lead to such readings. It is possible that there is some substance in the creek water that the meter is attempting to "read" as oxygen. We are considering collecting water samples from the sampling points and using standard Winkler titrations to determine percent oxygen.

MARCH ACTIVITIES

We anticipate collecting all of the ground water samples the first and second weeks of March and submitting them form analysis. Upon receipt, the data packages will be reviewed for completeness, assembled by matrix group (soil borings, surface water, surface sediment, ground water) and sent to our Grand Rapids staff for data validation.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; January, 1992

DATE: February 5, 1992

ACTIVITIES

On January 6, 1992, a visit was made to the former Amphenol site to discuss the field aspects of the project, the timing and the types of reports that will be prepared. Present at the meeting were Michael Jarvis and Larry Light of Franklin Power Products, James Meyers of Metcalf & Eddy, and James Keith, Jeff Bryan and John Bassett of WW Engineering & Science. Soil boring and well locations were staked, and surface water and sediment sampling points were identified. On January 9-10, a surveyor placed panels at the property corners and measured their distances and elevations. On January 11, the site was flown by Accu-Air of Seymour, Indiana. A 1"=50' mylar copy of the air photo was delivered the following week and paper copies were distributed. The surveyor also established north-south and east-west baselines at the southeast corner of the property to locate the soil gas survey holes.

On January 27, 1992, James Keith, John Bassett and James Meyers again visited the site and talked with Mr. Kneebone to arrange for the soil gas survey scheduled to begin January 28. It was arranged that the pretreatment building would be cleaned out so that it could be used to store field equipment, and drums and tanks for auger cuttings and rinsate. Keys were provided for the main building, the pretreatment building and the room provided for a laboratory. The soil gas locations (28) were marked and staked as

described in the field QAPjP. Mr. Don Moran, the GC analyst from the WWES Grand Rapids office arrived, set up his GC and began calibration. An introductory meeting was held with Mr. John Bonsett of the Johnson County Health Department to explain the RFI/CMS. Mr. Bonsett will be put on the mailing list for monthly reports as provided in the IT Work Plan 4.6.1., and copies of past reports will be provided for his files.

The soil gas survey field work began January 28. Soil gas samples were collected by Geo Trace, Inc. of Wentzville, Missouri. Soil gas samples were acquired by inserting a stainless probe with an expendable point into the ground to the desired depth using a truck-mounted hydraulic ram. The probe was raised a short distance off the point and a vacuum was applied to clear the tubing train of any ambient air. The tubing was connected to a tedlar bag, placed in a vacuum box, to which a vacuum was applied with a metered electric hand pump. The bag contents were briefly sampled with a HNU/PID then taken to the analyst for GC analysis. Then the probe was pushed to the next depth and a second sample was collected. Soil gas sampling operations were completed on January 30, 1992.

Prior to conducting the soil gas survey, a test run was made by collecting soil gas samples from 2,4,6,8,10,12,14 and 16 feet in the vicinity of MW-12, near the storm sewer. It was found that the GC response increased with depth to 14 feet. Water was encountered at 16 feet (the storm sewer invert is at a depth of about 15 feet there). Because it was likely that ground water depth was around 10 feet below grade in other areas of the site, it was decided to use sampling depths of 6 and 8 feet to avoid pulling ground water into the tubing train. All holes were filled with a bentonite seal after sampling.

Where a positive response was measured in the soil gas, there was a significant separation between concentrations at the two depths. The greatest soil gas responses were located directly south of the building, but there were also responses west and southwest of the building (including beneath the parking lot pavement) and southeast of the building. Two peaks were prominent in the GC readouts: one was identified as trichloroethylene and the other as tetrachloroethylene. An additional point was sampled, about 60 feet west of the southwest corner of the back parking lot to test for possible effects of the parking lot pavement on soil gas values. A technical memorandum will be prepared detailing the soil gas results when the analytical data have been reviewed for QA/QC.

Mr. Gene Hill of Bendix in South Bend, Indiana was formerly an employee at the Amphenol plant. He was contacted by telephone on January 3, 1992 about the lapping compound tanks, and he stated that an underground tank did exist outside the back door of the plant. The tank had contained a mixture of diesel fuel and Stoddard solvent, and was about 4'x4'x8'. The capacity was about 1,000 gallons. He stated that the tank was in use only a short time and may have been removed. On January 27, the soil was probed and checked with a metal detector at the reported tank location, but nothing suggesting a buried tank was located. Soil borings will be taken at this location.

PROBLEMS

Rather than use the grid location system specified in the field QAPjP, it was decided to use a coordinate system based on the number of feet north and west of the grid origin, which is located at the panel at the southeast corner. This panel is visible in the air photo, so points can be precisely relocated with that system.

FEBRUARY ACTIVITIES

Field activities will continue the first week of February. The upgradient monitoring wells will be installed and soil samples collected. Then downgradient wells will be installed and soil samples collected. We estimate that these field activities will continue for three weeks. When all wells are installed and developed, a round of ground water samples, surface water samples and surface sediment samples will be collected and submitted for analysis.

cc: Susan Gard
John Bonsett

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; December, 1991

DATE: January 6, 1992

A copy of a U.S. EPA letter to J. Michael Jarvis Dated December 12, 1991 was received which stated that the revised QAPjP (laboratory) had been approved. Signature pages were signed by James H. Keith as WWES Project Manager, then sent to Richard Rediske of the Grand Rapids office to sign as QA Manager. Mr. Rediske will return the signature pages to your office. Mr. Jim Meyer of the Metcalf & Eddy Indianapolis office (oversight contractor) was contacted and project startup was discussed. Accu-Air of Seymour, Indiana was contacted regarding site air photos and maps, and a surveyor was contacted to set panels on the site and survey them in, providing horizontal and vertical control to develop a topographic map for the project.

In January, we will visit the site with the oversight contractor to select sampling points and arrange for work, storage and decontamination areas at the plant. We will produce an air photo and topographic map of the site (1"=50' with 1" contours) and submit it to your office.

cc: Susan Gard

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
5010 Stone Mill Road
Bloomington, Indiana 47408

SUBJ: Report of Activities for Former Amphenol RFI/CMS; November, 1991

DATE: December 5, 1991

During the month of November, we were not contacted by U.S. EPA Region V regarding comments, corrections or approvals on the submitted QAPjP documents. We are awaiting approval or additional requests for information regarding the field and laboratory QAPjP submittals.

Please note that the WW Engineering and Science Bloomington office address has changed.

cc: Susan Gard

WW Engineering & Science, Inc.
5010 Stone Mill Road • Bloomington, IN 47408 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Former Amphenol RFI/CMS; Octobere, 1991

DATE: November 5, 1991

During the month of October, we were not contacted by U.S. EPA Region V regarding comments, corrections or approvals on the submitted QAPjP documents. We are awaiting approval or additional requests for information regarding the field and laboratory QAPjP submittals.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Former Amphenol RFI/CMS; September, 1991

DATE: October 4, 1991

During the month of September, the subcontracted laboratory, Southwest Laboratory of Oklahoma, Inc. provided the LSS Section of the U.S. EPA Central Regional Laboratory with information regarding laboratory methods for Appendix IX compound analysis. The request by the LSS Section for the information had been made in a letter dated August 27, 1991. We are awaiting approval or additional requests for information regarding the field and laboratory QAPjP submittals.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Former Amphenol RFI/CMS; August, 1991

DATE: September 17, 1991

During the month of August, WW Engineering & Science awaited U.S. EPA Region V approvals, or additional comments and/or requests for information, on its QAPjP submittals.

cc: Susan Gard

+

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Former Amphenol RFI/CMS; July, 1991

DATE: August 5, 1991

During the month of July, WW Engineering & Science responded, at your verbal direction, to written comments submitted by the Chief of the Quality Assurance Section on March 26, 1991, to which we had been directed not to respond in a letter to Mr. J. Michael Jarvis dated April 23, 1991, signed by Joseph M. Boyle for Kevin Pierard, Acting Chief of the RCRA Enforcement Branch. Responses to verbal comments by Dr. Cheng-Wen Tsai were also included. The response was dated July 26, 1991. We are awaiting a U.S. EPA reply.

I will be on vacation from August 8 - August 19, 1991. Questions or comments that cannot wait until I get back can be directed to Mr. John Bassett or Dr. Robert Aten.

cc: Susan Gard

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Former Amphenol RFI/CMS;
July, 1991

DATE: August 5, 1991

During the month of July, WW Engineering & Science responded, at your verbal direction, to written comments submitted by the Chief of the Quality Assurance Section on March 26, 1991, to which we had been directed not to respond in a letter to Mr. J. Michael Jarvis dated April 23, 1991, signed by Joseph M. Boyle for Kevin Pierard, Acting Chief of the RCRA Enforcement Branch. Responses to verbal comments by Dr. Cheng-Wen Tsai were also included. The response was dated July 26, 1991. We are awaiting a U.S. EPA reply.

I will be on vacation from August 8 - August 19, 1991. Questions or comments that cannot wait until I get back can be directed to Mr. John Bassett or Dr. Robert Aten.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS; June, 1991

DATE: July 8, 1991

During the month of June, the revised general and laboratory QAPjP documents have been undergoing review by U.S. EPA Region V. We are awaiting comments or requests for additional information.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: James H. Keith, Project Manager
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS; May, 1991

DATE: June 10, 1991

During the month of May, both the general and laboratory QAPjP documents were revised in accordance with comments from U.S. EPA Region V. Copies of both documents were forwarded to Region V for review. James H. Keith will be Project Manager for the RFI portion of the work, and he will be preparing the Monthly Reports.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Revised Report of Activities for Amphenol RFI/CMS; April, 1991

DATE: May 28, 1991

Comments on the QAPjP were received from the U.S. EPA Region V Quality Assurance Section and the RCRA Enforcement Branch on April 25, 1991. Revisions are being made to the QAPjP in accordance with those comments.

During a teleconference between the Quality Assurance Section and Southwest Laboratory, a number of verbal comments and requests for revision to the laboratory QAPjP were made. According to your office, no written comments to the laboratory QAPjP will be submitted to us. Inasmuch as our QAPjP revisions depend in part on the laboratory QAPjP revisions, WWES will submit the second draft of the field QAPjP as soon as revision information is received from the contract laboratory. The laboratory QAPjP will be submitted to you by the contract laboratory under separate cover.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Revised Report of Activities for Amphenol RFI/CMS; April, 1991

DATE: May 28, 1991

Comments on the QAPjP were received from the U.S. EPA Region V Quality Assurance Section and the RCRA Enforcement Branch on April 25, 1991. Revisions are being made to the QAPjP in accordance with those comments.

During a teleconference between the Quality Assurance Section and Southwest Laboratory, a number of verbal comments and requests for revision to the laboratory QAPjP were made. According to your office, no written comments to the laboratory QAPjP will be submitted to us. Inasmuch as our QAPjP revisions depend in part on the laboratory QAPjP revisions, WWES will submit the second draft of the field QAPjP as soon as revision information is received from the contract laboratory. The laboratory QAPjP will be submitted to you by the contract laboratory under separate cover.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS; April, 1991

DATE: May 13, 1991

Comments on the QAPjP were received from the U.S. EPA Region V Quality Assurance Section and the RCRA Enforcement Branch on April 25, 1991. Revisions are being made to the QAPjP in accordance with those comments, and the revised document will be sent to U.S. EPA on or before May 25, 1991.

During a teleconference between the Quality Assurance Section and Southwest Laboratory, a number of questions were asked about laboratory practices and methods, but no comments or requests for revisions were made, to our knowledge. As soon as any comments are received, a revised laboratory QAPjP will be prepared and sent to U.S. EPA Region V.

cc: Susan Gard

WW Engineering & Science, Inc.
627 North Morton Street • Bloomington, IN 47404 • (812) 336-0972, Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS; March, 1991

DATE: April 5, 1991

This office received word by telephone on March 29 that comments on the Quality Assurance Project Plans will be forthcoming. We anticipate responding to those comments as part of upcoming work in April.

cc: Susan Gard

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS;
February, 1991

DATE: March 7, 1991

WWES is still awaiting agency review comments and approval of QAPjP's previously submitted.

cc: Susan Gard

WW Engineering & Science, Inc.
GEOSCIENCES • 627 N. Morton Street • Bloomington, Indiana 47404 • PH (812) 336-0972 Fax (812) 336-3991

TO: William Buller
U.S. EPA, Region V, 5HR-12
230 South Dearborn Street
Chicago. Illinois 60604

FROM: Robert E. Aten, Project Director
WW Engineering & Science
627 North Morton Street
Bloomington, Indiana 47404

SUBJ: Report of Activities for Amphenol RFI/CMS;
December, 1990 and January, 1991

DATE: February 5, 1991

Drafts of the Quality Assurance Project Plan (QAPjP) for overall project activities and a laboratory QAPjP for Southwest Laboratories of Oklahoma were completed and sent to U.S. EPA Region V for review and comment. WWES is awaiting agency review and approval of the QAPjP's and the contract laboratory.

cc: Susan Gard